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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,142	06/20/2003	Jean-Pierre Sommadossi	06171.IDX 1007 CON2	8280

57263 7590 09/20/2007  
KING & SPALDING LLP  
1180 PEACHTREE STREET  
ATLANTA, GA 30309

EXAMINER
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MCINTOSH III, TRAVISS C

ART UNIT	PAPER NUMBER
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1623

MAIL DATE	DELIVERY MODE
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09/20/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/602,142

Applicant(s)

SOMMADOSSI ET AL.

Examiner

Traviss C. McIntosh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 89 and 130-187 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 89 and 130-187 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

The Amendment filed 6/29/2007 has been received, entered into the record, and carefully considered. The following information provided in the amendment affects the instant application by:

Claims 89, 130, 131, 142, and 152 have been amended.

Claims 178-187 have been added

Claims 1-88 and 90-129 have been canceled.

Remarks drawn to rejections of Office Action mailed 3/29/2007 include:

112 2<sup>nd</sup> paragraph rejections: which have been overcome by applicant's amendments and have been withdrawn.

Obvious type double patenting rejections: which have been maintained for reasons of record.

An action on the merits of claims 89 and 130-187 is contained herein below. The text of those sections of Title 35, US Code which are not included in this action can be found in a prior Office action.

#### ***Double Patenting***

The rejection of claims 89 and 130-177 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-31 of U.S. Patent No. 7,163,929 is maintained for reasons of record. Newly added claims 178-187 are rejected herein additionally

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for the same reasons. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications claim methods of treating viral infections using pyrrolopyrimidine nucleosides, and alternately in combination with the same additional anti-viral agents. It is noted that the '929 patent is drawn to treating flavivirus or pestivirus infections and the instant application is drawn to treating HCV infections, however, the Flaviviridae family of viral infections is known to include flavivirus, pestivirus and HCV, as such, it would be obvious to treat various members of the Flaviviridae family of viruses with the same composition. It would be obvious to one of ordinary skill in the art that the instant application and the '929 patent are substantially overlapping.

Applicants argue that the '929 patent is drawn to treating flavivirus or pestivirus infections, and the instant claims are drawn to treating HCV, which is not a flavivirus or pestivirus. This is not found convincing. As set forth supra, the Flaviviridae family of viral infections is known to include flavivirus, pestivirus and HCV, as such, it would be obvious to treat various members of the Flaviviridae family of viruses with the same composition. It would be prima facie obvious to practice the invention of the '929 patent on another member of the Flaviviridae virus family, being HCV.

The provisional rejection of claims 89 and 130-177 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2-17 and 19-75 of copending Application No. 11/005,472 is maintained for reasons of record. Newly added claims 178-187 are rejected herein additionally for the same reasons. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications claim

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methods of treating HCV using pyrrolopyrimidine nucleosides, and alternately in combination with the same additional anti-viral agents. It is noted that the '472 application is drawn to 3'-prodrugs of the compounds used in the instant application, however, it is noted that the 3'-position of the instant application are optionally amino acid esters. As such, it would be obvious that the instant application and the '472 application are indeed overlapping in that both claim methods of treating HCV with overlapping pyrrolopyrimidine nucleotides having a '3-amino acid prodrug moiety. Obviousness based on similarity of structure and function entails motivation to make claimed compound in the expectation that compounds similar in structure will have similar properties. Where the prior art compounds essentially bracket the claimed compounds and are known to be effective as well known pesticides, for example, one of ordinary skill in the art would be motivated to make the claimed compounds in searching for new pesticides. See **In re Payne**, 606 F.2d 303, 203 USPQ 245, 254-55 (CCPA 1979). Prodrug esters are well known in the art, as are amino acid prodrug esters, as such, absent unexpected results, the examiner believes it would be obvious to make the 3'-amino-acid prodrug esters of the '472 application.

It is noted that applicants did not argue this rejection and requested a deferral.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Traviss C. McIntosh whose telephone number is 571-272-0657. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Traviss McIntosh  
September 14, 2007

Shaojia A. Jiang  
Art Unit 1623  
Supervisory Patent Examiner

 9/17/07